

## Abstract

A piezoelectric actuator, for example for actuating a mechanical component, has a multilayered structure of piezoelectric layers (2) and, in a piezoelectrically active region (A), can be acted on with an electrical voltage by means of internal electrodes (3, 4) that are situated between the layers. The layer structure of the piezoelectric actuator (1) includes inactive regions (B, C); at least the top part or bottom part, as an inactive region (B, C) without internal electrodes, is comprised of a material whose dielectric constant ( $\epsilon'_{33}$ ) is less than the dielectric constant ( $\epsilon_{33}$ ) of the active region (A).

(Fig. 1)